REMARKS

Claim 19 has been amended to specify that the ratio of component (a) (holding polymer) to component (b) (hydroxethyl cellulose) is about 1:2.2 to about 1:0.4. This amendment incorporates the ratio set forth in claim 20 as an endpoint for the claimed range. This amendment is also supported by the Table 1 data, discussed below. New claim 33 specifies that the holding polymer consists essentially of a polymer which comprises a monomer combination of vinyl caprolactam, methacrylamidopropyl dimethylamine and vinyl pyrrolidone.

Claims 27, 28, 30 and 32 have been allowed. Claims 19-25, 29 and 31 stand rejected under 35 U.S.C. 103(a) as unpatentable over Peffly (US 5,985,294) in view of Samain et al. (US 6,511,651) and Maurin et al. (US 6,403,542).

As noted in the Amendment dated October 14, 2004, the subject inventors have found that effective hair styling compositions can be formulated at low holding polymer concentrations , (i.e., levels of from about 0.04 to less than 1.5% active) using a holding polymer which comprises a specific polymer (i.e. a polymer that comprises a monomer combination of vinyl caprolactam, methacrylamidopropyl dimethylamine and vinylpyrrolidone (VP)) when the compositions further comprise a polysaccharide, and specific holding polymer to polysaccharide ratios are employed.

Table 1 provides curl retention data for compositions having holding polymer to hydroxyethyl cellulose ratios of 1.0:2.2 to 1.0:0.1. In compositions A to I, the amount of holding polymer was constant (1.25% active), and the amount of hydroxyethyl cellulose varied. Composition A (holding polymer to hydroxyethyl cellulose ratio of 1.0:0.1) was demonstrated to provide significantly lower curl retention values than Compositions B through I, i.e. Composition A failed to provide desirable hold. Moreover, Composition B (holding polymer to hydroxyethyl cellulose ratio of 1.0:0.4), had considerably better curl retention than Composition E (holding polymer to hydroxyethyl cellulose ratio of

1.0:0.2). The Table 1 data also shows that as the hydroxyethyl cellulose level increased, the holding performance of the compositions first increased and then decreased. The air dry data of Test 1 (6 hours) revealed the highest curl retention (in the 90% region) for Examples B and C (holding polymer to hydroxyethyl cellulose ratios1.0:04 and 1.0:07 respectively), with somewhat lower curl retention (83.8% , 83.3% and 80.1%, respectively) being shown for the higher hydroxyethyl cellulose content compositions of Compositions G, H and I. Thus, it was shown that hair styling compositions having both low levels of holding polymer and desirable curl retention properties could be produced using a combination of the claimed holding polymer and hydroxyethyl cellulose, and employing certain holding polymer to hhydroxyethyl cellulose ratios.

Example III of Peffly has been cited as teaching compositions comprising 1.5% active of a PVP/VA copolymer and 1% by weight of hydroxethyl cellulose, and having a ratio of holding copolymer to hydroxyethyl cellulose that meets the claimed weight ratio limitation. Applicants respectfully point out that the total amount of holding polymer in Example III of Peffly is actually 3.5% (2.00% PVP + 3.00% of PVP/VA copolymer (50% active)), an amount that is more than double the holding polymer content of the subject claims. [1] It is respectfully submitted that, notwithstanding Peffly's disclosure of compositions having hair styling polymer contents of 0.01 to 20%, the citation fails to provide an enabling disclosure as to how to effectively obtain desirable styling benefits at the low end of the claimed range. As demonstrated by the data provided in the subject application, a low level of holding polymer, in the absence of an appropriate amount of hydroxyethyl cellulose, did not provide desirable hold. There is nothing in Peffly that would disclose to one skilled in the art that effective curl retention could be achieved using the low levels holding polymer set forth in the subject claims by inclusion of hydroxyethyl cellulose and the employment of the claimed holding polymer to hydroxyethyl cellulose ratios.

[1] It is further noted that the holding polymer to hydroxyethyl cellulose ratio of Example III of Peffly is 3.50:1.00, a ratio well outside the claimed range.

Samain and Maurin fail to cure the deficiencies of Peffly. Neither citation discloses hydroxyethyl cellulose or provides any direction or teaching with respect to the claimed ratios. As preciously noted, Maurin is directed to compositions for washing keratin materials (i..e., shampoos), as opposed to styling compositions.

In view of the foregoing reconsideration and allowance of the subject claims, as hereby amended, is respectfully requested.

If a telephone conversation would be of assistance in advancing the prosecution of the present application, applicants' undersigned attorney invites the Examiner to telephone her at the number provided.

Respectfully submitted,

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